Calendar No. 214

100TH CONGRESS *1st Session*	SENATE	REPORT 100-91

RADON PROGRAM DEVELOPMENT ACT OF 1987

REPORT

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

TO ACCOMPANY

S. 744

JUNE 30 (legislative day, JUNE 23), 1987.—Ordered to be printed

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RADON PROGRAM DEVELOPMENT ACT OF 1987

JUNE 30 (legislative day, JUNE 23), 1987.—Ordered to be printed

Mr. MITCHELL, from the Committee on Environment and Public Works, submitted the following

REPORT

[To accompany S. 744]

The Committee on Environment and Public Works, to which was referred the bill (S. 744) to assist States in responding to the threat to human health posed by exposure to radon, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

GENERAL STATEMENT

Radon is a naturally occurring element found in soils and rocks containing granite, shale, uranium, and phosphate. In its gaseous forms radon can seep into homes and other structures through cracks in basement floors and foundations. Radon gas can also enter structures through a water supply as it is vaporized as water comes out the tap.

Radon contamination of homes and other buildings is a serious public health problem. Exposure to radon poses a significant threat of lung cancer, second only to cigarette smoking. The Environmental Protection Agency (EPA) estimates that as many as 20,000 lung cancer deaths each year are attributable to radon.

Radon can be found at varying levels in virtually every State in the country. The EPA estimates that as many as one million homes nationally could be affected by unsafe levels of radon.

In a recent study of environmental and health risks, the EPA ranked exposure to radon gas as posing the greatest overall risk of cancer among a group of 26 population sources which were assessed. Radon was tied in first place in the cancer risk category with the problem of worker exposure to chemicals.

In the same study, EPA also assessed a wide range of environmental problems based on cancer and non-cancer health risks, ecological effects, and welfare effects. In this overall assessment, exposure to radon was ranked as the fourth most significant problem among the 31 problems identified.

In response to growing concern about the health threats posed by radon, Congress enacted the "Radon Gas and Indoor Air Quality Research Act" in 1986. This legislation directs the EPA to conduct a national survey of radon, to demonstrate radon mitigation methods, and to carry out other needed research. This research program will produce information concerning the extent and seriousness of radon contamination, the effectiveness of mitigation measures, and health effects which will be useful in consideration of additional steps to respond to the radon problem.

There is a need, however, to complement existing efforts with development of programs addressing radon in air and water at the State level. States need this assistance as soon as possible. The increase in national attention to the radon problem has increased the public demand for assessment and control of radon contamination. Much of this increased public demand is falling on State governments.

Many States recognize that they have a radon problem but lack the resources to develop needed new programs. Other States are concerned that they may have a radon problem and would like to investigate, but do not have the resources to conduct a survey or carry out related activities.

The "Radon Program Development Act" will direct the EPA to expand technical assistance to States on radon issues and will provide "seed money" to help States initiate radon related programs. The bill is intended to help States get programs started well. It is not intended to establish a permanent Federal grant program to States for radon program management. The State program development portion of the reported bill is based on legislation introduced by Senator Mitchell (S. 744).

Another provision of the bill will expand and improve the radon training and proficiency testing programs of the EPA. These programs will help assure that training in radon assessment and mitigation is available to both public employees and other interested parties and that the public has information concerning the proficiency of private firms engaged in radon measurement and mitigation. EPA is authorized to charge fees for proficiency testing. This part of the reported bill was developed based on legislation introduced by Senator Specter and with the assistance of Senator Gore.

The bill also directs the Administrator of the EPA to determine the extent of radon contamination in the Nation's schools and in Federal buildings.

There is evidence that radon poses a health threat in schools. A survey of 140 schools in Pennsylvania identified 39 buildings where radon exceeded the level where EPA recommends action be taken. Children are particularly sensitive to radon and combined exposure in homes and schools may pose a significant risk. The school assessment portion of the reported bill is based on legislation developed by Senator Chafee.

While there is very little data concerning the extent of radon contamination in Federal buildings, many Federal buildings are located in areas known to have high levels of radon. The Federal government has an obligation to determine the extent and seriousness of radon contamination of these buildings. The Federal buildings assessment provision of the bill was included as an amendment proposed by Senator Baucus.

An authorization of $10 million a year for 3 years is provided to support the State grant assistance program. An authorization of $1.5 million is provided for the proficiency testing provision of the bill. An authorization of $1.5 million is provided for the survey of radon in schools.

Section-by-Section Analysis

SECTION 1: SHORT TITLE

This Act may be cited as the "Radon Program Development Act of 1987".

SECTION 2: FINDINGS

The findings section of the reported bill states that radon is a serious threat to public health, that additional training and information is needed in both the public and private sectors, that States should play a role with the Federal Government in responding to radon problems, and that the levels of exposure of children to radon in schools should be assessed.

SECTION 3: DEFINITIONS

The definitions section of the reported bill provides definitions of key terms used in the bill. The term "radon" is specifically defined to include radon whether found in air, water, or soil. Other terms defined include "States", and "school buildings".

SECTION 4: TECHNICAL ASSISTANCE TO STATES

The EPA is directed to conduct activities to assist States in development of radon programs.

Activities to be conducted by the Administrator include establishment of a clearinghouse of radon information, development of materials concerning design of radon programs, publication of public information materials, demonstration of radon mitigation methods, and establishment of a national data base on radon.

EPA is also directed to provide technical assistance to individual States to the extent resources are available. This assistance may include radon surveys, education programs, or mitigation efforts.

SECTION 5: TRAINING, TESTING AND CONTROL PROFICIENCY

EPA is directed to establish programs to provide the public with information on firms or individuals who can reliably measure radon in homes and other buildings and reliably construct or implement measures to reduce radon levels. These programs are voluntary and are for informational purposes.

EPA is also directed to design and implement training seminars for State and local officials and professional and private firms ad-

dressing radon monitoring, analysis, mitigation, health effects, and control program design.

EPA is authorized to collect fees and charges to cover the costs of the programs provided for in this section. Fees are to be deposited in a "Radon Service Fee Account" at the EPA and used to support the activities provided for in this section. No fees or charges are to be applied to State or local governments, including local educational agencies.

SECTION 6: GRANT ASSISTANCE TO STATES

EPA is authorized to make grants to States for the purpose of assisting States in the development and implementation of programs for the assessment and mitigation of radon.

State applications are to identify the seriousness and extent of radon exposure in the State, identify the State agency responsible for radon programs, describe the radon activities and programs which the State proposes to conduct in the next year, including an outline of long-range plans, and include a budget for the program.

A number of activities are specified in the bill including surveys of radon in the State, implementation of control programs, purchase of radon measurement devices, purchase of laboratory equipment, development of data storage systems, and operation of a "radon hot line".

In the event State applications for assistance exceed the funds available for grants in a given year, EPA is to give priority to projects based on criteria including the seriousness of the problem, potential for reduction of radon levels, and other factors.

The Federal share of the grants is 75 percent in the first year of a grant to a State; 60 percent in the second year; and 50 percent in the third year.

A State may not use more than 15 percent of a grant for purchase of radon measurement devices; not more than 10 percent for radon demonstration programs; and not more than 25 percent for general overhead.

Grant funds may be used for financial assistance to persons only to the extent that such assistance is related to demonstration projects or purchase of radon measurement devices. Grant funds may be used to assist local governments, including local educational agencies, in implementation of activities related to educational material, implementation of control programs, and training.

SECTION 7: STUDY OF RADON IN SCHOOLS

EPA is to conduct a study to determine the extent of radon contamination in the Nation's schools.

In conducting the study, EPA is to identify areas which have a high probability of including schools which exceed the EPA recommended action level. The EPA is to consider geologic data, data on radon in homes, and the type of school building in developing lists of areas.

The EPA is to conduct radon tests in a representative sample of schools in high risk areas and, to the extent resources allow, conduct radon tests in additional schools. Not less than 50 percent of

funds appropriated for this survey should be used for testing of schools.

EPA is to make available to the appropriate State agencies, as designated by the Governor each State, a list of any identified areas in that State and any data on radon in schools in the State. The information should include, where possible, information on the approximate number of students at risk in the identified areas. The EPA is also to provide States with guidance on radon testing and remediation in schools and is authorized to provide to States radon testing devices for conducting tests in schools. EPA is authorized to select school buildings for the demonstration of diagnostic and remedial efforts in such buildings. In selecting schools for demonstration of mitigation measures, the Administrator shall consult with appropriate officials of that school.

SECTION 8: REPORTS

EPA is to provide a report to Congress within 12 months of enactment, and annually thereafter, describing assistance to States under sections 4, 5, and 6 of this Act and outlining assistance activities expected over the following 12 month period.

EPA is to provide a status report on the progress of the survey of radon in schools under section 7 of this Act within 12 months of the date of enactment. EPA is to provide a final report on radon in schools within 24 months of the date of enactment.

EPA is also to provide a report on the effectiveness of radon mitigation measures as such measures are actually performed by homeowners and contractors. The report is due within 12 months of the date of enactment.

Reports, except for the status report on the school survey and the mitigation measure effectiveness report, are to be reviewed by the advisory groups established under the Superfund amendments (i.e. a Federal agency advisory group and a citizen/interest advisory group).

SECTION 9: STUDY OF RADON IN FEDERAL BUILDINGS

The Departments of Agriculture, Interior, and Defense and the General Services Administration and Veteran's Administration are to conduct studies to determine the extent of radon in Federal buildings.

Studies of radon contamination by Federal agencies are to be designed in accordance with criteria established by the Administrator of the EPA. Studies shall include test data from a representative sample of Federal buildings in high risk areas identified by the EPA.

Federal agency surveys of buildings are to be completed and forwarded to the EPA within 20 months of the date of enactment of this Act. The EPA is to provide a report to the Congress summarizing the studies and assessing the extent of radon contamination in Federal buildings within 24 months of the date of enactment.

The EPA Administrator is to assist Federal departments and agencies in development of survey designs, provide guidance and data concerning the health risks associated with radon, and provide technical guidance concerning measures to mitigate radon.

The Administrator is also authorized to make available to other Federal agencies radon test equipment and laboratory services on a cost reimbursable basis.

SECTION 10: REGULATIONS

EPA is authorized to issue such regulations as may be necessary to carry out this Act.

SECTION 11: AUTHORIZATIONS

Authorizations in the reported bill include:

—such sums as may be necessary for implementation of the technical assistance provisions of the bill;

—$1.5 million for start-up of the proficiency testing and training provisions of section 5 of the bill;

—$10 million for fiscal years 1988, 1989, and 1990 for grant assistance to States under section 6 of the bill; and

—a total of $1.5 million for implementation of the survey of radon in schools provided for in section 7, $.5 million of which is for demonstration of radon diagnostic and remedial efforts in schools.

HEARING

The Subcommittee on Environmental Protection and the Subcommittee on Superfund and Environmental Oversight held a joint hearing on radon issues on April 2, 1987. Testifying were Senators Albert Gore, Arlen Specter, and William Proxmire, the Deputy Administrator of the Environmental Protection Agency, representatives of State governments, and witnesses familiar with radon contamination in schools.

ROLLCALL VOTES

Section 7(b) of rule XXVI of the Standing Rules of the Senate and the rules of the Committee on Environment and Public Works require that any rollcall votes taken during consideration of this bill be announced in this report.

On June 17, 1987, the full committee met to markup S. 744 as reported from subcommittee. One rollcall vote was taken which resulted in the bill being ordered reported by a unanimous vote of 16–0. Voting to report the bill were Senators Baucus, Breaux, Burdick, Chafee, Durenberger, Graham, Lautenberg, Mikulski, Mitchell, Moynihan, Pressler, Reid, Stafford, Simpson, Symms, and Warner.

REGULATORY IMPACT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the Committe makes the following evaluation of the regulatory impact of the reported bill: It is not expected that there will be any new regulatory burdens created by the reported bill.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires each bill to contain a statement of the cost of such bill prepared by the Congressional Budget Office. That report follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, June 29, 1987.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for S. 744, the Radon Program Development Act of 1987.

If you wish further details on this estimate, we will be pleased to provide them.

With best wishes,
Sincerely,

ROBERT F. HALE
(For Edward M. Gramlich, Acting Director).

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

1. Bill number: S. 744.
2. Bill title: Radon Program Development Act of 1987.
3. Bill status: As ordered reported by the Senate Committee on Environment and Public Works, June 17, 1987.
4. Bill purpose: S. 744 would create a new federal program within the Environmental Protection Agency (EPA) to assist states in identifying and mitigating radon contamination.

In order to assist the states in the development of radon asessment and reduction programs, Section 4 would require the EPA to collect, maintain and distribute data on the measurement and mitigation of radon contamination. In addition, the agency would be directed to provide states with technical assistance, including the design and implementation of radon surveys, public education and control programs.

Section 5 of the bill would require the development and implementation of a training, testing and control program under which the EPA would train state and local officials and private contractors in proper monitoring and mitigation methods. The agency also would be required to provide the public with information such as directories that list approved contractors. The bill would authorize initial funding of $1.5 million in fiscal year 1988 for these activities. In addition, the agency would be authorized to collect fees from contractors for testing of measuring and mitigation technologies. Funds so collected would be deposited to a newly created Radon Service Fee Account in the U.S. Treasury, from which they would be available for appropriation under this section.

Section 6 would authorize the appropriation of $10 million for each of the fiscal years 1988–1990 for state grants. These grants would be used to assist states in their efforts to develop radon programs. In the first year that a grant is made to a state, as least 25

percent of that state's total program cost must be funded with nonfederal funds. The nonfederal share would continue to grow in subsequent years that a grant is awarded to that state.

Section 7 would require the EPA to conduct a study to identify radon contamination in public schools and design a survey that would enable the Congress to assess such contamination in different parts of the country. Appropriations of $1.5 million would be authorized for this purpose and for a demonstration project at an appropriate school.

Finally, Section 9 of the bill would require certain federal agencies to work with the EPA in developing and implementing a study of federal buildings in high-risk areas. No additional funds are authorized to be appropriated to the EPA or other federal agencies to carry out this section.

5. Estimated cost to the Federal Government:

[By fiscal year, in millions of dollars]

	1988	1989	1990	1991	1992
Estimated authorization level	15.3	11.3	11.1	0.2	0.2
Estimated outlays	6.0	11.3	11.5	7.5	1.4

The costs of this bill fall within budget function 300.

Basis of Estimate

For the purposes of this estimate, it is assumed that all funds provided to carry out Sections 5, 6, and 7 will be appropriated for the fiscal years authorized. The authorization levels for Section 4 have been estimated on the basis of CBO economic assumptions and pricing factors obtained from the EPA. Outlays have been estimated on the basis of historical spending patterns for similar programs.

CBO estimates that, in order to carry out the agency's responsibilities under Section 4 (relating to data collection and dissemination, technical assistance and survey design), the EPA would require appropriations of about $2 million in fiscal year 1988 and about $1 million for each of the two following years. After that, in-house and contract expenses to maintain data bases and publications are expected to fall to about $0.2 million a year.

The estimated cost of the bill includes the costs involved in report preparation under Sections 8 and 9 as well as annual grant administration expenses of about $0.4 million for three years.

The costs for federal agencies other than the EPA to carry out the provisions of Section 9 are not expected to be significant. Such costs will depend on survey design, sample size, and the availability of appropriations. The General Services Administration has estimated, for example, that a survey of about 250 federal buildings would cost about $250,000. That agency has about $100,000 available for this work for fiscal year 1988. Thus, if sample size is limited to a total for all agencies of 250 buildings, only an additional $150,000 would be needed in fiscal year 1988 to carry out this provision.

In addition, it is not possible to estimate any offsetting receipts (or potential additional authorizations) that may arise from the collection of fees under Section 5. If instituted, the fees would probably result in only small offsetting receipts in each year.

6. Estimated cost to State and local governments: State participation in any of the activities funded under S. 744 would be strictly voluntary. If states choose to participate, their expenses would probably be limited to the required matching share on whatever grants they are awarded. For example, if all funds authorized in fiscal year 1988 are appropriated and awarded, aggregate state contributions would be approximately $3 million. In 1989 and 1990 (assuming that grants are still applied for), state contributions would rise to about $6.7 million and $10 million, respectively.

7. Estimate comparison: None.

8. Previous CBO estimate: None.

9. Estimate prepared by: Deborah Reis.

10. Estimate approved by: C.G. Nuckols (for James L. Blum, Assistant Director for Budget Analysis).

S. 744 as Reported

[Note: The following is the text of the Committee amendment to S. 744 as reported.]

SHORT TITLE

SECTION 1. This Act may be cited as the "Radon Program Development Act of 1987".

FINDINGS

SEC. 2. The Congress finds that—

(1) exposure to radon poses a serious threat to public health in certain areas of the country and is estimated to cause between 5,000 and 20,000 lung cancer deaths each year;

(2) a General Accounting Office report notes that 30 percent of about 40,000 indoor radon measurements were above the level at which the Environmental Protection Agency recommends that action be taken so as to reduce such level, thus indicating that indoor radon contamination is a national problem;

(3) Federal response to the health threat posed by radon is essential and should continue at existing or expanded levels;

(4) the Federal radon program should include authority to conduct training seminars and otherwise disseminate information to State and local governments and private firms and individuals on radon contamination;

(5) it is essential that in encouraging the private sector to increase its role in radon testing and remediation that there be safeguards for citizens to ensure the reliability and proficiency of testing and remediation firms;

(6) State governments should play a role in responding to the health threat posed by radon;

(7) Federal assistance to States will make possible a coordinated Federal-State effort to respond to the health threats posed by radon;

(8) according to the Environmental Protection Agency, scientific studies of other types of radiation exposure indicate that children may be more sensitive and, consequently could be more at risk than adults from exposure to radon; and

(9) assessment of the extent of exposure of children to radon in schools will facilitate appropriate response to such exposure.

DEFINITIONS

SEC. 3. For the purposes of this Act, the term—

(1) "Administrator" means the Administrator of the Environmental Protection Agency;

(2) "radon" means the radioactive gaseous element and its short lived decay products produced by the disintegration of the element radium occurring in air, water, soil, or other media;

(3) "State" means the 50 States, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, the Northern Mariana Islands, American Samoa, and the Trust Territories;

(4) "local educational agency" means—

(A) any local educational agency as defined in section 198 of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 3381);

(B) the owner of any non-profit elementary or secondary school building; and

(C) the governing authority of any school operated pursuant to section 6 of the Act of September 30, 1950 (Public Law 874, 81st Congress) relating to impact aid for children of members of the Armed Forces;

(5) "non-profit elementary or secondary school" means any elementary or secondary school (as defined in section 198 of the Elementary and Secondary Education Act of 1965) owned and operated by one or more nonprofit corporations or associations no part of the net earnings of which inures, or may lawfully inure, to the benefit of any private shareholder or individual;

(6) "school building" means—

(A) structures suitable for use as classrooms, including school facilities such as laboratories, libraries, school eating facilities, or facilities used for the preparation of food;

(B) any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education;

(C) other facilities used for the instruction of students or for the administration of educational or research programs; and

(D) maintenance, storage, or utility facilities essential to the operation of the facilities described in subparagraphs (A), (B), and (C).

TECHNICAL ASSISTANCE TO STATES

SEC. 4. (a) The Administrator, or another Federal department or agency when designated by the Administrator, shall develop and

implement activities designed to assist State radon programs. These activities may include, but are not limited to—

(1) establishment of a clearinghouse of radon related information including mitigation studies, public information materials, surveys of radon levels, and relevant information;

(2) development and publication of informational materials for State and local officials concerning design and implementation of programs responding to radon;

(3) publication of public information materials concerning radon health risks and methods of radon mitigation;

(4) demonstration of radon mitigation methods in various types of structures and in various geographic settings and publication of findings; and

(5) establishment of a national data base, with data organized by State, concerning the location and amounts of radon.

(b) Upon request of a State, the Administrator, or another Federal department or agency when designated by the Administrator, shall, to the extent resources and statutory limitations allow, provide technical assistance to such State in development or implementation of programs addressing radon. Such assistance may include, but shall not be limited to—

(1) design and implementation of surveys of the location and occurrence of radon within a State;

(2) design and implementation of public information and education programs;

(3) design and implementation of State or local programs to control radon in existing or new structures; and

(4) assessment of mitigation alternatives in unusual or unconventional structures.

TRAINING, TESTING, AND CONTROL PROFICIENCY

SEC. 5. (a) The Administrator shall—

(1) implement a voluntary program to provide to the public information on firms or individuals that can reliably measure radon. The program shall include, but is not limited to—

(A) measuring radon in a consistent fashion;

(B) recording and reporting measurements accurately to homeowners; and

(C) providing measurements consistent with Environmental Protection Agency protocols;

(2) design and implement training seminars for State and local officials and professional and private firms addressing radon monitoring, analysis, mitigation, health effects, public information, and radon program design and implementation;

(3) develop a voluntary program to provide the public with information on firms or individuals that can reliably construct and implement measures to reduce radon levels. A judgment of proficiency in the program should include, but is not limited to—

(A) the training individuals have received in radon reduction techniques;

(B) knowledge of protocols used to diagnose and reduce radon levels; and

(C) other relevant information to be determined by the Administrator.

(b) For purposes of subsection (a)—

(1) the Administrator is authorized to establish and collect fees and charges from private firms and individuals for information and services provided under this section to cover the costs of carrying out the provisions of this section;

(2) in implementing paragraph (1) of this subsection, the Administrator shall assure that—

(A) all of the fees and charges collected by the Administrator shall be deposited in a separate account within the Treasury of the United States. Such account shall be known as the "Radon Service Fee Account" (hereinafter referred to as the "Account");

(B) no fees or charges shall be applied to State or local governments;

(C) all funds in the account shall only be available to the extent provided in appropriation Acts, for carrying out the provisions of this section; and

(D) within 180 days of the enactment of this Act, such rules and regulations as may be necessary to carry out the provisions of this section are promulgated.

GRANT ASSISTANCE TO STATES

SEC. 6. (a) For each fiscal year upon application of the Governor of a State, the Administrator may make a grant, subject to such terms and conditions as the Administrator considers appropriate, under this section to such State for the purpose of assisting the State in the development and implementation of programs for the assessment and mitigation of radon.

(b) An application for a grant under this section in any fiscal year shall contain such information as the Administrator shall require, including—

(1) an assessment of the seriousness and extent of radon exposure in the State;

(2) an identification of the State agency which has the primary responsibility for radon programs and which will receive the grant, a description of the roles and responsibilities of the lead State agency and any other State agencies involved in radon programs, and description of the roles and responsibilities of any municipal, district, or areawide entity involved in radon programs;

(3) a description of the activities and programs related to radon which the State proposes in such year, and, to the extent practicable, an outline of long-range goals and objectives, and estimated resource needs, for the subsequent 2-year period; and

(4) a budget specifying Federal and State funding of each element of activity of the grant application.

(c) Activities eligible for such Federal grant assistance are—

(1) survey of radon levels, including special surveys of geographic areas or classes of buildings (such as, among others, public buildings, school buildings, high risk residential construction types);

(2) development of public information and educational materials concerning radon assessment, mitigation, and control programs;

(3) implementation of programs to control radon in existing and new structures;

(4) purchase by the State of radon measurement equipment or devices, including assistance to persons which the State determines to be low-income;

(5) purchase and maintenance of analytical equipment connected to radon measurement and analysis, including costs of calibration of such equipment;

(6) payment of costs of Environmental Protection Agency approved training programs related to radon for permanent State employees;

(7) payment of general overhead costs and program administration costs, consistent with applicable regulations of the Environmental Protection Agency;

(8) development of a data storage and management system for information concerning radon occurrence, levels, and programs;

(9) payment of costs of demonstration of radon mitigation methods and technologies, as approved by the Administrator; and

(10) operation of a toll-free radon information "Hot Line".

(d) The Administrator shall support eligible activities proposed in State applications with the full amount of available funds. In the event that State applications for funds exceed the total funds available in a fiscal year, the Administrator shall give priority to activities or projects proposed by States based on the following criteria—

(1) the seriousness and extent of the radon contamination problem to be addressed;

(2) the potential for the activity or project to bring about reduction in radon levels;

(3) the potential for development of innovative radon assessment techniques, mitigation measures, or program management approaches which may be of use to other States; and

(4) the need to assist each State submitting an application in development and implementation of an appropriate radon program.

(e) The Federal share of the cost of radon program activities implemented with Federal assistance under this section shall not exceed 75 percent of the costs incurred by the State in implementing such program in the first year of a grant to such State; 60 percent in the second year; and 50 percent in the third year. Federal assistance shall be made on the condition that the non-Federal share is provided from non-Federal funds.

(f) Notwithstanding any other provision of this section, not more than 15 percent of the amount appropriated to carry out this section may be used to make grants to any one State, including any grants to local governments or areawide organizations in such State.

(g) Funds not obligated to States in the fiscal year for which funds are appropriated shall remain available for obligation during the next fiscal year.

(h) Funds granted to a State pursuant to this section in a fiscal year shall remain available for obligation by such State for the fiscal year for which appropriated and the following fiscal year.

(i) States may use funds from grants under this section for financial assistance to persons only to the extent such assistance is related to demonstration projects or the purchase and analysis of radon measurement devices.

(j) States may, at the Governor's discretion, use funds from grants under this section to assist local governments in implementation of activities eligible for assistance under paragraphs (2), (3), and (6) of subsection (c) of this section.

(k) No grant may be made under this section in any fiscal year to a State which in the preceding fiscal year received a grant under this section unless the Administrator determines that such State satisfactorily implemented such grant funded activities in such preceding fiscal year.

(l) The Administrator may request such information, data, and reports of the State as he considers necessary to make the determination of continuing eligibility under this section.

(m) The costs of purchasing radon measurement devices under subsection (c)(4) of this section shall not exceed 15 percent of the amount of the grant in such year. The costs of implementing demonstration programs under subsection (c)(9) of this section shall not exceed 10 percent of the amount of the grant in such year. The costs of general overhead under subsection (c)(7) of this section shall not exceed 25 percent of the amount of such grant in such year.

(n) States receiving funds under this section shall provide to the Administrator all radon-related information, generated in their activities, he considers necessary.

STUDY OF RADON IN SCHOOLS

SEC. 7. (a) The Administrator shall conduct a study for the purpose of determining the extent of radon contamination in the Nation's school buildings, including in the case of a school using a nonpublic water source (such as a well or other groundwater), radon contamination of the water.

(b)(1) In carrying out such study, the Administrator shall identify and compile a list of areas within the United States which the Administrator determines have a high probability of including schools which exceed the Environmental Protection Agency's recommended target level for remedial action.

(2) In compiling such list, the Administrator shall make such determinations on the basis of, among other things, the following:

(A) geological data;

(B) data on high radon levels in homes and other structures nearby any such school; and

(C) physical characteristics of the school buildings.

(3) In conducting such study the Administrator shall design a survey which when completed allows Congress to characterize the extent of radon contamination in schools in each State. However, the survey model shall include testing data from a representative sample of schools in high-risk area identified in paragraph (1) of

this subsection and shall include additional testing to the extent resources are available for such testing, including any reliable data supplied by States, schools, or other parties.

(c)(1) The Administrator shall make available to the appropriate agency of each State, as designated by the Governor of such State, a list of high-risk areas within each State, including a delineation of such areas and any other data available to the Administrator for schools in that State. The Administrator shall also provide guidance and data detailing the risks associated with high radon levels and technical guidance and related information concerning testing for radon within schools and water supplies, and methods of reducing radon levels to assist such agencies in testing for radon within school buildings.

(2) In addition to the assistance required by paragraph (1) of this subsection, the Administrator is authorized to make available to appropriate agencies of each State, as designated by the Governor of such State, cannisters or other devices suitable for use by such agencies in conducting tests for radon within the schools under the jurisdiction of any such State agency. The Administrator is authorized to make available to such agencies the use of laboratories of the Environmental Protection Agency, or to recommend laboratories, to evaluate any such cannisters or devices for the presence of radon levels.

(d) The Administrator is authorized to select, from high-risk areas identified in subsection (b), school buildings for purposes of enabling the Administrator to undertake diagnostic and remedial efforts to reduce the levels of radon in such school buildings. Such diagnostic and remedial efforts shall be carried out with a view to developing technology and expertise for the purpose of making such technology and expertise available to any local educational agency and the several States.

REPORTS

SEC. 8. (a) The Administrator shall provide to the Congress reports and plans concerning the implementation of this Act, including within 12 months after the date of enactment of this Act and annually thereafter, a plan describing the assistance provided to States under sections 4, 5, and 6 of this Act during the previous 12-month period and describing the assistance to be provided in the next following 12-month period, including a description of the personnel and financial resources necessary to implement these sections.

(b) On or before the expiration of the 12-month period following the date of the enactment of this Act, the Administrator shall submit to the Congress a status report with respect to actions taken by the Administrator in conducting the study required by section 7, including the results of diagnostic and remedial work.

(c) On or before the expiration of the 24-month period following such date of enactment, the Administrator shall submit a final report setting forth the results of the study conducted pursuant to section 7, including the results of the Administrator's diagnostic and remedial work, and the recommendations of the Administrator.

(d) Reports required under subsections (a) and (c) of this section shall be reviewed by the advisory groups provided for in section 403(c) of the Superfund Amendments and Reauthorization Act of 1986 prior to submittal to Congress.

(e) Not later than the 12 months after the date of enactment of this Act, the Administrator shall submit to the Congress a report on the effectiveness of radon mitigation measures as described in Environmental Protection Agency and State publications as such measures are actually performed by homeowners and contractors. Such report shall include information on average radon reductions and on the variability of the reductions achieved in practice due to inherent limitations of the mitigation measures, misapplication of the mitigation measures, and application of the mitigation measures to structures for which such measures are not suited. For the purposes of this subsection, "variability" includes, but is not limited to, variation between structures, within structures, and over time.

STUDY OF RADON IN FEDERAL BUILDINGS

SEC. 9. (a) The Secretary of the Interior, the Secretary of Defense, the Secretary of Agriculture, the Administrator of the General Services Administration, and the Administrator of the Veterans' Administration shall conduct studies for the purpose of determining the extent of radon contamination in buildings owned by the Department of the Interior, the Department of Defense, the Department of Agriculture, the General Services Administration, and the Veterans' Administration including, in the case of a Federal building using a nonpublic water source (such as a well or other groundwater), radon contamination of the water.

(b)(1) The Administrator shall identify and compile a list of areas within the United States which the Administrator, in consultation with the departments and agencies identified in subsection (a) of this section, determines have a high probability of including Federal buildings which exceed the Environmental Protection Agency's recommended target level for remedial action.

(2) In compiling such list, the Administrator shall make such determinations on the basis of, among other things, the following:

(A) geological data;

(B) data on high radon levels in homes and other structures nearby any such Federal building; and

(C) physical characteristics of the Federal buildings.

(3) Studies provided for in subsection (a) of this section shall be based on design criteria specified by the Administrator. Federal departments or agencies identified in subsection (a) shall not later than 180 days after enactment of this Act, submit a study design to the Administrator for approval. The study design shall follow the most recent EPA guidance documents including the "Citizens Guide to Radon," and "Interim Protocol for Screening and Follow Up: Radon and Radon Decay Products Measurements," and the "Interim Indoor Radon & Radon Decay Product Measurement Protocol," or any more recent guidance documents. The study design shall include testing data from a representative sample of Federal buildings in each high-risk area identified in paragraph (1) of this

subsection and shall include additional testing to the extent resources are available for such testing, including any reliable data supplied by States, Federal agencies, or other parties.

(c)(1) The Administrator shall provide to the departments or agencies identified in subsection (a) of this section guidance and data detailing the risks associated with high radon levels and technical guidance and related information concerning testing for radon within Federal buildings and water supplies, and methods for reducing radon levels.

(2) In addition to the assistance required by paragraph (1) of this subsection, the Administrator is authorized to make available to the departments or agencies identified in subsection (a) cannisters or other devices on a cost reimburseable basis, suitable for use by such departments or agencies in conducting tests for radon within Federal buildings. The Administrator is authorized to make available to such departments or agencies the use of laboratories of the Environmental Protection Agency, on a cost reimburseable basis, or to recommend laboratories, to evaluate any such cannisters or devices for the presence of radon levels.

(d) The Administrator or Secretary of the designated Federal agencies shall complete studies required pursuant to subsection (a) of this section and provide the study to the Administrator not later than 20 months after enactment of this Act.

(e) On or before the expiration of the 24-month period following such date of enactment, the Administrator shall submit a report to the Congress describing the results of the studies conducted pursuant to subsection (a) of this section.

REGULATIONS

SEC. 10. The Administrator is authorized to issue such regulations as may be necessary to carry out the provisions of this Act.

AUTHORIZATION

SEC. 11. (a) For carrying out the purposes of section 4 of this Act, there are authorized to be appropriated such sums as may be necessary.

(b) For fiscal year 1988, there is authorized to be appropriated, but not from the Account, such sum, not to exceed $1,500,000, as may be necessary to initiate the provisions of section 5 of this Act. Monies appropriated pursuant to this authorization shall remain available until expended.

(c) For carrying out the purposes of section 6 of this Act, there is authorized to be appropriated, for each of the fiscal years 1988, 1989, and 1990, such sum, not to exceed $10,000,000, as may be necessary.

(d)(1) For the purpose of carrying out the provisions of subsection (d) of section 7, there is authorized to be appropriated not to exceed $500,000.

(2) For the purpose of carrying out the provisions of section 7 other than subsection (d) of section 7, there is authorized to be appropriated such sum, not to exceed $1,000,000, as may be necessary. Not less than 50 percent of the sum shall be expended for testing of schools as required by section 7(b)(3) of this Act.

Amend the title so as to read: "An Act to authorize the Environmental Protection Agency to assist States in development of radon programs, to conduct a study to determine the extent to which radon in the Nation's schools poses a threat to children and employees in such schools, and for other purposes.".

CHANGES IN EXISTING LAW

Section 12 of Rule XXVI of the Standing Rules of the Senate requires publication of any changes made in existing law by the reported bill.

This bill makes no changes in existing law.

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